

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



Top Secret

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basic Imagery Interpretation report

Soviet Mobile Missile Summary

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DEPLOYED STRATEGIC SSM FACILITIES

BE: Various

USSR

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RCA-01/0002/81

FEBRUARY 1981

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SOVIET MOBILE MISSILE SUMMARY

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SUMMARY

1. (S/D) This report updates information in NPIC report [REDACTED] on SS-20 mobile IRBM bases in the USSR. This report also includes a synopsis significant mobile missile activity seen at two offensive missile test centers, a production facility, and several command and control facilities.

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2. (TSR) Significant activity observed at deployed facilities (Figure 1 and Table 1) during the reporting period included a new mobile missile base in the Novovibirsk Complex, possible conversion of another former SSM launch facility to a mobile base, four SS-20 field training exercises, an SA-4 training exercise near a remote site, partial erection of three SS-20 missile canisters in single-bay garages, first identification of an SS-20 canister dolly in the field, and SS-20 vehicle mockups under construction at one complex.

3. (U) The reporting period extends from [REDACTED] A location map, seven annotated photographs, a drawing, and three tables are included in this report.

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DISCUSSION**Deployed Complexes**

4. (TSR) As of [REDACTED] 24 of the 30 mobile bases were in the late stage of construction or complete and were assessed to be capable of maintaining an operational unit. Based on past construction practices, the 30 bases, including the remote site at Drovyanyaya, will eventually contain a total of 273 single-bay garages to house SS-20 missiles on launchers. Eleven of the bases are in the western section of the USSR (Belorussia), eight are in the Ural mountain region, five are in the western section of Siberia, and six are in the eastern section of Siberia.

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Eastern Siberia

5. (TSR) **Drovyanyaya Mobile IRBM Base 3.** Activity was observed approximately 900 meters south-east of this base on [REDACTED] Canvas panels had been placed over vertical supports just off the road between the base and dismantled SSM Launch Position 2 [REDACTED], probably to simulate a single-bay and a three-bay garage. SS-20 transporter-erector-launcher (TEL) leveling jack imprints for deployment of a launch line were being prepared near the canvas shelters, and a T-shaped graded area was nearby. By [REDACTED] the canvas panels had been removed, and no additional activity was observed. This activity was possibly in preparation for an SS-20 exercise that was not conducted or had been rescheduled.

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6. (S/D) **Drovyanyaya Mobile IRBM Base 4.** On [REDACTED] preparations were underway for the resumption of construction at this base. Components for at least two single-bay garages were delivered to the site between [REDACTED] This is the first identification of single-bay garage components at this base, which was identified under construction in November 1978.

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7. (TSR) **Drovyanyaya Mobile IRBM Base 5.** [REDACTED] an SS-20 field training exercise involving at least five camouflaged vehicles and one van truck was immediately southwest of the base. This same area has been used for previous SS-20 exercises. Another SS-20 exercise was observed in the Drovyanyaya Complex on the same dates in Field Training Area (FTA) 3A [REDACTED], which is approximately 8.5 nautical miles (nm) from Base 5.

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8. (TSR) **Drovyanyaya Rail-to-Road Transfer Point (RTP; [REDACTED])** On [REDACTED] a probable command, control, and communications (C3) unit conducted a field training exercise near the RTP. At least six to eight heavily camouflaged vehicles were observed. SS-20-associated vehicles have previously occupied this area.

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9. (TSR) **Drovyanyaya SS-20 Remote Site 1.** On [REDACTED] an SA-4 field training exercise was in progress approximately 500 meters south of the remote site. Two defensive missile canister transporters and a probable LONG TRACK radar (in travel mode) were near two missile-checkout tents. An SA-4 sustainer canister and a SA-4 booster crate were on one of the transporters. A truck-mounted crane and approximately 15 other vehicles or pieces of equipment were also present. This is the first identification of SA-4 equipment at this location.

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10. (TSR) **Drovyanyaya FTA 3A.** An SS-20 field training exercise was underway in this area on [REDACTED]. A probable C3 unit consisting of at least six camouflaged vehicles was present. The last observed exercise in this area was on [REDACTED]

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11. (TSR) **Drovyanyaya FTA S2-Rvt [REDACTED]** Additional evidence indicating that SS-20 canister dollies could be used to resupply field-deployed SS-20 launch units was observed on [REDACTED] when an SS-20 canister dolly was identified in one of the revetments (Figure 2). The dolly was observed empty, and no canisters were present. In addition, one probable [REDACTED] van truck and several small unidentified vehicles were in the area.

(Continued p. 6)

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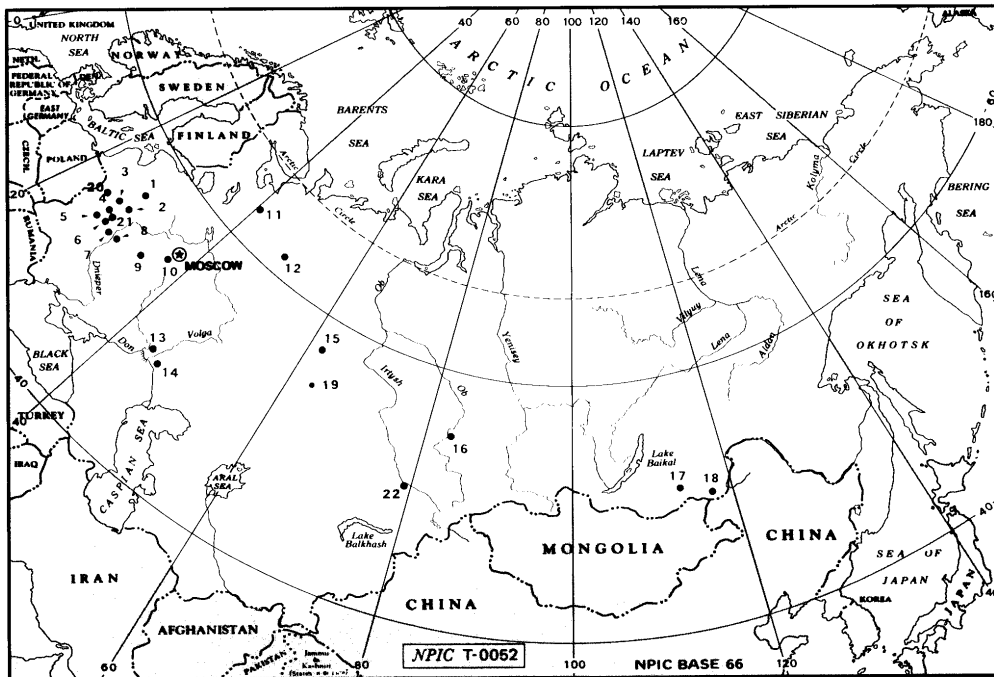


FIGURE 1. LOCATIONS OF SS-16/-20 ACTIVITY IN THE USSR

Item	Installation Name
1	Polotsk Mobile IRBM Base 1
2	Polotsk Mobile IRBM Base 2
3	Postavy Mobile IRBM Base
4	Smorgon Mobile IRBM Base 1
	Smorgon Mobile IRBM Base 2
5	Minsk Motor Vehicle and Guided Missile Support Plant
6	Kozhanovichi Mobile IRBM Base
7	Konkovichi Mobile IRBM Base
8	Mozyr Mobile IRBM Base/Training Facility
9	Rechitsa Mobile IRBM Support Base
	Rechitsa SS-20 Remote Site 1
	Rechitsa SS-20 Remote Site 2
	Rechitsa SS-20 Remote Site 3
10	Bryansk Guided Missile Support Equipment Plant II
11	Serpukhov SSM Engineering Research Training Facility
12	Plesetsk Missile/Space Test Center SSM
	Yurya Mobile IRBM Base 1
	Yurya Mobile IRBM Base 2
	Yurya Mobile IRBM Base 3
	Yurya Mobile IRBM Base 4
13	Volgograd Steel and Machinery Plant
	Krasny Barricada 221
14	Kapustin Yar Missile/Space Test Center SSM
15	Verkhnyaya Salda Mobile IRBM Base 1
	Verkhnyaya Salda Mobile IRBM Base 2
	Verkhnyaya Salda Mobile IRBM Base 3
	Verkhnyaya Salda Mobile IRBM Base 4
16	Novosibirsk Mobile IRBM Base 1
	Novosibirsk Mobile IRBM Base 2
	Novosibirsk Mobile IRBM Base 3
	Novosibirsk Mobile IRBM Base 4
17	Drovyanaya Mobile IRBM Base 1
	Drovyanaya Mobile IRBM Base 2
	Drovyanaya Mobile IRBM Base 3
	Drovyanaya Mobile IRBM Base 4
	Drovyanaya Mobile IRBM Base 5
	Drovyanaya SS-20 Remote Site 1
18	Olovyannaya Mobile IRBM Base 1
19	Bobrovskiy Missile Support Rear Depot
20	Lida Mobile IRBM Base 1
21	Gresk Mobile IRBM Base 1
22	Semipalatinsk NWPG

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Table 1. Summary of SS-20 Construction at Deployed Areas This table in its entirety is classified TOP SECRET RUFF

OPERATIONS AREA										GENERAL SUPPORT AREA/NUCLEAR PAYLOAD HANDLING FACILITY										Status of Construction at RTP	Remarks/Comments
SSM	First Identified	Date Assessed as Being Operational	Date Last Imaged	Single-Bay Garage		3-Bay Garage		11-Bay Garage		Construction and/or Modification	11-Bay Garage (66 x 18m)		Tech Support Bldg		High 2-Bay Bldg		Clerestory Bldg				
Installation Name				Comp	Uncon	Comp	Uncon	Comp	Uncon		Number	Construction Comp	Number	Construction Comp	Number	Construction Comp	Number	Construction Comp			
EASTERN USSR	Drovyaya Mobile IRBM Base 1			9	—	3	—	1	—	Yes	1	Yes	0*	—	0*	—	0*	—	Clerestory bldg uncon	Personnel shelters uncon near athletic field;	
	Drovyaya Mobile IRBM Base 2			9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—	Personnel shelters uncon in spt area; 2 admin/personnel bldgs uncon in spt area		
	Drovyaya Mobile IRBM Base 3			9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—	Personnel shelters uncon in spt area		
	Drovyaya Mobile IRBM Base 4			0	9	0	3	0	—	No	2	No	0*	—	0	—	0	—	Temporary construction spt area being razed; mockup sliding-roof and 3-bay garages		
	Drovyaya Mobile IRBM Base 5			9	—	3	—	0	—	Yes	2	No	0*	—	0	—	0	—	2 SS-11 canisters in spt area		
	Drovyaya Remote Site 1			3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—	3 unid multibay garages uncon near spt area		
	Olovayana Mobile IRBM Base 1			0	9	0	3	0	0	No	0	0	0	—	0	—	0	—	2 SS-11 canisters in spt area		
CENTRAL USSR	Novosibirsk Mobile IRBM Base 1			9	—	3	—	0	—	Yes	2	Yes	0*	—	0*	—	0*	—	Complete	Unid construction near the entrance to the operations area	
	Novosibirsk Mobile IRBM Base 2			9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—	4 SS-11 canisters in spt area; footings present for 1 personnel/admin bldg in spt area		
	Novosibirsk Mobile IRBM Base 3			9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—	Personnel shelters uncon in spt area		
	Novosibirsk Mobile IRBM Base 4			9	—	3	—	0	—	Yes	1	No	0*	—	—	—	—	—			
	Novosibirsk Mobile IRBM Base 5			0	7	0	2**	0	—	No	2	No	0*	—	—	—	—	—			
	Verkhnyaya Salda Mobile IRBM Base 1			9	—	3	—	0	—	Yes	2	Yes	0*	—	0*	—	0*	—	Complete	2 personnel/admin bldgs uncon in spt area	
	Verkhnyaya Salda Mobile IRBM Base 2			9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—	Small bunker constructed in spt area		
	Verkhnyaya Salda Mobile IRBM Base 3			9	—	3	—	—	—	Yes	1	Yes	0*	—	—	—	—	—			
	Verkhnyaya Salda Mobile IRBM Base 4			9	—	3	0	0	0	Yes	1	No	—	—	—	—	—	—			
	Yurya Mobile IRBM Base 1			9	—	3	—	0	—	Yes	1	Yes	0*	—	0*	—	0*	—	5 SS-11 canisters near spt area		
	Yurya Mobile IRBM Base 2			9	—	3	—	0	—	Yes	1	Yes	0	—	0	—	0	—	Clerestory bldg in late stage of const	Rifle range uncon near spt area	
	Yurya Mobile IRBM Base 3			8	—	3	0	0	0	Yes	1	Yes	—	—	—	—	—	—	Small prob personnel bunker completed at entrance to operations area; canvas panels being erected; a section of the dismantled SS-7 also in center of operations area		
	Yurya Mobile IRBM Base 4			9	—	3	—	0	0	Yes	1	No	—	—	—	—	—	—			
WESTERN USSR	Konkovich Mobile IRBM Base			9	—	3	—	1	—	Yes	2	Yes	1	Yes	1	Yes	1	Yes	Complete		
	Kuchanovich Mobile IRBM Base			9	—	3	—	1	—	Yes	2	Yes	1	Yes	1	Yes	1	Yes	Complete	2 admin/personnel bldgs uncon in spt area	
	Mozor Mobile IRBM Base Training Facility			9	—	3	—	0	—	Yes	3	Yes	1	Yes	1	Yes	1	Yes	Complete	Tenth single-bay garage adjacent to clerestory bldg	
	Postaya Mobile IRBM Base			9	—	3	—	0	—	Yes	2	Yes	1	Yes	1	Yes	1	Yes	Complete	2 personnel bldgs and 1 vehicle maintenance bldg uncon in spt area	
	Smorgon Mobile IRBM Base 1			9	—	3	—	0	—	Yes	2	Yes	1	Yes	1	Yes	0	—	Complete	1 multistory bldg uncon near warehouse storage bunker; several poss SS-20 vehicle mockups uncon in spt area	
	Smorgon Mobile IRBM Base 2			4	5	3	—	—	—	No	1	No	0	—	0	—	0	—	Several bldgs uncon in spt area		
	Rechitsa Mobile IRBM Base			—	—	—	—	—	—	—	2	Yes	1	Yes	1	Yes	1	Yes	Complete	Multibay garage and other bldgs uncon in spt area	
	Rechitsa Remote Site 1			3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—	Complete		
	Rechitsa Remote Site 2			3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—			
	Rechitsa Remote Site 3			3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—			
	Polotsk Mobile IRBM Base 1			9	—	3	—	0	—	Yes	2	Yes	1	No	1	No	1	No	Complete		
	Polotsk Mobile IRBM Base 2			9	—	3	—	0	—	Yes	1	Yes	0	—	0	—	0	—	2 personnel shelters uncon in spt area		
	Lida Mobile IRBM Base 1			0	4	0	2**	0	—	No	1	No	0	—	0	—	0	—		Several bldgs uncon in spt area	
Gresh Mobile IRBM Base 1			0	6	0	3**	0	—	No	1	No	0	—	0	—	0	—	Meliorat uncon near spt area			

Red indicates changes since 15 Sep 1980, the cutoff date of the updated report.

*The former SS-7 ICBM complexes in the central and eastern USSR currently have their RTP; these areas consist of high two-bay, technical support, and clerestory hangars.

**Four-bay garages.

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12. (TSR) A field-resupply role has been suspected for this canister dolly, but until this observation it had only been seen at the mobile bases or at RTPs. The dolly is [] long overall including the tow bar. The cradle assembly for supporting the canister is []. Four vertical postlike objects, which may be hydraulic cylinders for raising and leveling the cradle of the dolly, were also on the dolly. This would allow for the roll-transfer of the canister between the dolly and a TEL.

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Western Siberia

13. (S/D) **Novosibirsk Mobile IRBM Base 1.** The type of vehicles that might be housed in a three-bay garage was observed at this base. On [] one probable MAZ-543 launch control missile support van (MSV), one probable power/generator MSV, and one probable [] van truck were observed in front of one three-bay garage.

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14. (TSR) **Novosibirsk Mobile IRBM Base 2.** Two partially erected SS-20 missile canisters with domed endcaps (Figure 3) were observed in open single-bay garages on []. Elements of a probable communications unit consisting of a possible TWIN EAR antenna, two probable [] van trucks, and two probable MSV were in front of the former SS-7 missile-ready building. No activity was observed on [] imagery of this base. A partially erected SS-20 missile canister was also in an open single-bay garage at Yurya Mobile IRBM Base 3 on [].

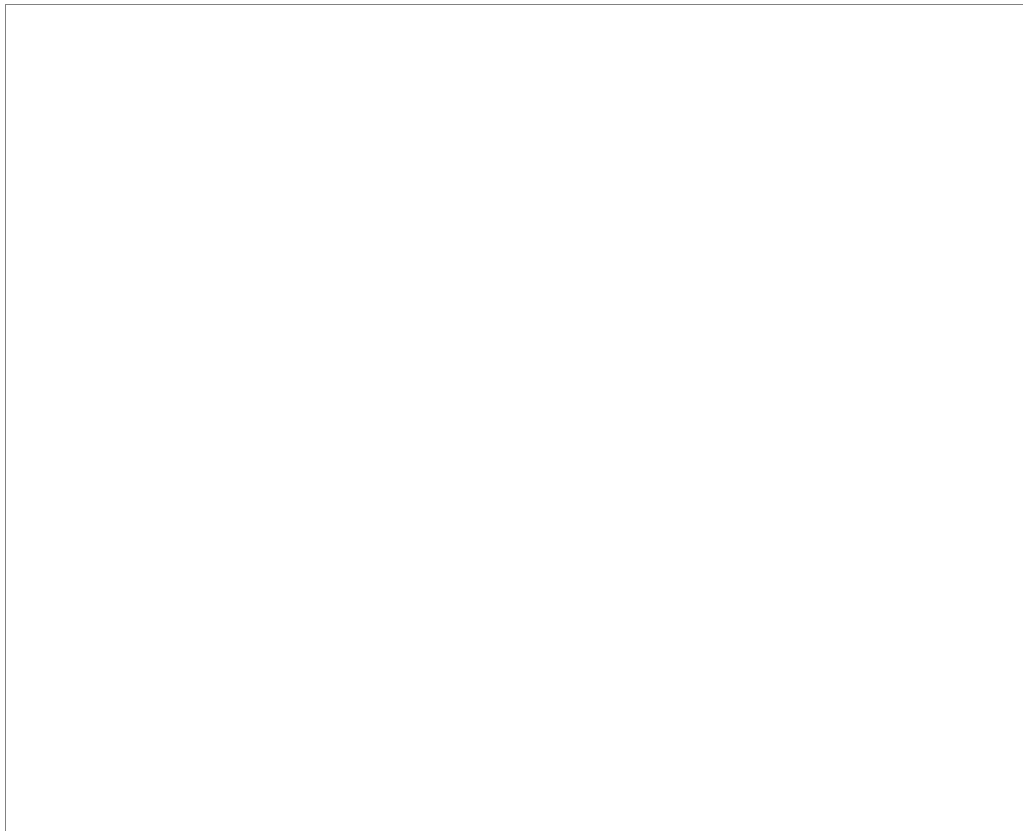
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15. (S/D) **Novosibirsk Mobile IRBM Base 5.** The fifth mobile IRBM base (Figure 4) in the Novosibirsk Complex, which is the 30th confirmed SS-20 mobile IRBM base, was identified in the early stages of construction on [] just west of dismantled SSM Launch Position 1 []. Footings for three single-bay garages and two three-/four-bay garages, as well as grading for at least one 11-bay garage, were present. On [] at least seven single-bay garages, two four-bay garages, and two 11-bay garages were seen under construction. This is the first confirmation of four-bay garages outside the Lida division in the western USSR and indicates a trend toward four-bay garages in the operations area, as opposed to the three-bay garages which were built at older mobile IRBM bases. The added bay is probably for additional missile support vehicles.

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16. (TSR) **Verkhnyaya Salda Mobile IRBM Base 2.** During the reporting period, a high-level of activity was observed at and around this base. On [] an SS-20 field training exercise was underway 4.7 nm southeast of the base. At least ten heavily camouflaged vehicles were in an abandoned borrow pit. However, no SS-20 TEL were present suggesting that this activity may have been C3 related. This was the first SS-20 field training exercise observed at the Verkhnyaya Salda Complex since April 1980.

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FIGURE 5. SS-20 LAUNCH LINE, VERKHNYAYA SALDA MOBILE IRBM BASE 2

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17. (S/D) On [] an SS-20 launch line, possibly returning from a field training exercise, was on the access road to the training area near the base (Figure 5). The line consisted of two empty SS-20 TEL, one six-axle chassis, three MAZ-543 cargo trucks, and one BTR-60PB armored personnel carrier. In addition, on [] one six-axle chassis, two MAZ-543 cargo trucks, one BTR-60PB, and one cargo van were at the main road intersection south of the base. On [], two empty probable TEL were behind an 11-bay garage in the support area.

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18. (TSR) Also on [] at least two sets of TEL leveling jack imprints were seen on the loop road near the dismantled silos at Launch Position 7 [], which is near the base. The pattern of the imprints indicated that the TEL had been aligned along the same azimuth as the loading azimuth for the dismantled SS-7 ICBM silos. Previous observations of TEL imprints at this site have been similar.

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19. (TSR) **Verkhnyaya Salda Launch Position 4** [] Indications that this facility may become an SS-20 mobile missile base were observed. On [] one possible SS-20 MSV and two other possible SS-20-associated vehicles were outside the two missile-ready buildings. The vehicles were heavily camouflaged, and two vehicles were still present on []. By [] roof vents had been added to both missile-ready buildings, suggesting that the missile-ready buildings are being used to shelter SS-20-associated equipment, perhaps as a prelude to mobile missile base construction.

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20. (S/D) **Yurya Mobile IRBM Base 3.** On [] an SS-20 missile canister was partially erected in an open single-bay garage at this base and was the third canister observed partially erected at a mobile IRBM base. In all three cases, the canisters were elevated to the same approximate angle, suggesting that the canister may have to be raised to a standard height to allow for maintenance, perhaps on the TEL.

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Western USSR

21. (S/D) **Postavy Mobile IRBM Base.** A probable heliport was under construction approximately 3 nm southwest of the base. A short runway/apron and three large support buildings were in the early stages of construction as of []. The probable heliport is probably connected by cable to the support area of the mobile base.

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22. (S/D) **Smorgon Mobile IRBM Base 1.** Several SS-20 vehicle mockups were observed under construction in the southwest corner of the support facility on []. Possible footings for mockups were present on [].

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Missile Test Centers

Kapustin Yar Missile/Space Test Center SSM

23. [] All SS-20-associated facilities and crew training areas were seen during the reporting period. Significant activity consisted of prelaunch activity at Launch Site 1C ([] possible dismantling of the SS-20 vehicle mockups at the Bivouac/Troop Training Area [] and SS-20 vehicle observations at the Missile Receiving/Inspection/Storage Area ([] the General Support Area [], Kapustin Yar Instrumentation Site 5 [] and three of the six SS-20 crew training areas. Three SS-20 launches occurred during the reporting period.²⁻⁴

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24. [] **Launch Site 1C.** On [] an open cable trench was between the three-bay garage and the launch control bunker at pad 1C-1. Another cable trench extended westward from the bunker toward the Telemetry/Tracking Facility ([] but the termination point could not be determined. On [], one camouflaged SS-20 TEL with canister and three camouflaged SS-20-associated vehicles were engaged in prelaunch activity. An SS-20 was reportedly launched on []. During the reporting period, four additional expended SS-20 missile canisters were observed at the pad 1C-2 boneyard—one on [].

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25. (S/D) **Bivouac/Troop Training Area.** On [] one camouflaged possible SS-20 TEL and two camouflaged possible SS-20-associated vehicles were in the SS-20 battalion-sized training area. On [] three additional camouflaged SS-20-associated vehicles were in the training area. Additionally, an SS-20 training TEL and several MAZ training vehicles were leaving the ground support equipment motor pool. On [] four camouflaged SS-20-associated vehicles were in the SS-20 battalion-sized training area. By [] the four SS-20-associated vehicles had departed. The SS-20 vehicle mockups, first observed on [] were possibly being dismantled. Portions of the mockup shells had been removed from all five mockups.

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26. (S/D) **Missile Receiving/Inspection/Storage Area.** SS-20 vehicles were in the area throughout the reporting period. On [], three camouflaged SS-20 vehicles were on the concrete hardstand near one of the loading/offloading ramps, and 11 canvas-covered, probable SS-20-associated vehicles were on flatbed railcars. On [] nine camouflaged SS-20-associated vehicles were in the missile support equipment holding area. The three vehicles, observed on [] remained on the hardstand. By [] ten camouflaged SS-20-associated vehicles were in the missile support equipment holding area. On [] one camouflaged probable TEL and five camouflaged SS-20-associated vehicles were in the holding area. The three vehicles had been removed from the concrete hardstand.

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27. (S/D) **General Support Area.** On [] one camouflaged SS-20-associated vehicle was at the facility. On [] one camouflaged SS-20-associated vehicle, one probable SS-20 canister dolly, and one SS-20 missile canister were at the facility. A train containing two canvas-covered, probable SS-20 TEL and seven canvas-covered, probable SS-20-associated vehicles was on a rail spur in a small marshalling yard immediately east of the General Support Area.

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28. (S/D) **Kapustin Yar Instrumentation Site 5.** On [] a probable SS-20-associated C3 unit was field deployed just west of the instrumentation site, approximately 27 nm east of launch complex C. The unit consisted of four camouflaged SS-20-associated vehicles.

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29. (S/D) **Crew Training Areas.** On [] four camouflaged probable SS-20-associated vehicles and three camouflaged possible SS-20-associated vehicles were at Crew Training Area 1 []. [] six camouflaged SS-20-associated vehicles were at Crew Training Area 3 []. [] a probable C3 unit was at Crew Training Area 5 [].

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The C3 unit consisted of five camouflaged SS-20-associated vehicles, including one TWIN EAR mobile troposcatter antenna.

Plesetsk Missile/Space Center

30. (S/D) **SSM Mobile Missile-Associated Bases.** All four mobile missile-associated bases, Mobile ICBM Facilities 1 [] and ICBM Launch Test Sites 5 [] and 6 [], were seen during the reporting period. However, the most recent usable imagery of any of these facilities was acquired on or prior to [].

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31. (S/D) On [] two sections of an expended SS-18 missile canister were being buried in the support area of Mobile ICBM Facility 2.

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32. (S/D) **Missile Handling Facility.** At the SS-16 receiving and checkout area of the Missile Handling Facility [] a new building was in an early stage of construction. Ground scarring was seen on [] and excavating was underway by [].

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33. (S/D) **Launch Site 21.** The crates that were initially seen in March alongside the perimeter road at site 21 were still present on []. Ten trucks remained in front of the site security building.

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Single-Bay Garage Production

Bryansk Guided Missile Support Equipment Plant II

34. (S/D) During the reporting period, sliding-roof sections for at least 19 single-bay garages were fabricated, and sliding-roof sections for at least 11 single-bay garages were shipped from the plant (Table 2). This is the second consecutive reporting period during which no stationary end sections were observed. Apparently these components are being shipped as quickly as they are fabricated.

SS-16/-20 Command and Control

35. (TSR) Significant command and control observations during the reporting period included the identification of probable antenna arrays atop C-shaped command and control buildings at Polotsk Mobile IRBM Base 2, Yurya Mobile IRBM Base 4, and Verkhnyaya Salda Mobile IRBM Base 4; a C-shaped command and control building under construction at Novosibirsk Mobile IRBM Base 5; a control building with a roof-mounted antenna array (YU-EL-01) at Drovyanaya Mobile IRBM Base 4; continuing modification of the command post bunker at Olovyannaya; horizontal dipole antennas under construction at Smorgon IRBM Regimental Headquarters Radio Communications Transmitter Station [] and new buildings under construction or completed at Mozyr MRBM Division Command Post/Bunker [] at Smorgon Mobile IRBM Base 1, and at Konkovichy Mobile IRBM Base.

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36. (TSR) At Polotsk Mobile IRBM Base 2, Yurya Mobile IRBM Base 4, and Verkhnyaya Salda Mobile IRBM Base 4 (Figures 6 through 8), probable antenna arrays were identified on the roofs of the C-shaped command and control buildings. No antenna arrays were observed on the other five previously reported, SS-20-associated, C-shaped command and control buildings (Table 3). These probable antenna arrays are different in configuration from the antenna arrays (designated YU-EL-01) on control buildings in the support areas of operational SS-20 bases in the Chita, Omsk, Orenburg, and Vladimir SRF Armies.

37. (TSR) The probable antenna array consists of two sets of three probable antenna positions in a triangular configuration. A possible feed point is visible between two of the probable antenna positions (Figure 9). At Verkhnyaya Salda Mobile IRBM Base 4, two additional antenna positions were observed. These positions are connected by cable to the same possible feed point (Figure 8).

38. (TSR) The probable antenna array at Polotsk Mobile IRBM Base 2 was first observed on []. At that time, a frequency diverse pair of horizontal dipole antennas was being erected in a clearing near the building. The probable antenna array on the C-shaped command and control building at Yurya Mobile IRBM Base 4 was present on [], the probable array was identified at Verkhnyaya Salda Mobile IRBM Base 4. Two lattice towers had also been erected here near the C-shaped command and control building.

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Table 2.
Minimum Number of SS-20 Single-Bay Garages Fabricated at and Shipped from Bryansk Guided Missile Support Equipment Plant II

This table in its entirety is classified SECRET//WNINTEL

Dates of Usable Coverages	Number of Days Between Usable Coverage	Fabricated		Shipped	
		Complete Garages*	Incomplete Garages	Complete Garages*	Incomplete Garages
	47	0	2—3	0	4—5
	25	0	5—6	0	2—3
	34	0	12	0	5—6
	Total	0	19—21	0	11—14

Garages fabricated and shipped, [redacted]

19—21 11—14

Garages fabricated and shipped prior to [redacted]

258—292 257—286

Garages fabricated and shipped since Apr 76

277—313 268—300

*Includes two stationary end sections and eight sliding-roof sections.

**No usable imagery of the plant was acquired between [redacted]

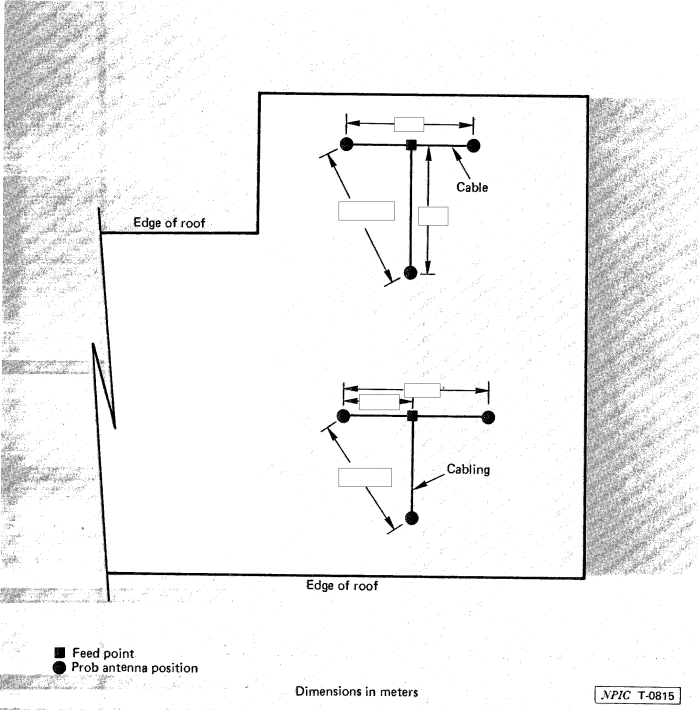


FIGURE 8. CONTROL BUILDING WITH PROBABLE ROOF-MOUNTED ANTENNA ARRAY, VERKHNYAYA SALDA MOBILE IRBM BASE 4

FIGURE 9. CONTROL BUILDING WITH PROBABLE ANTENNA ARRAY, POLOTSK MOBILE IRBM BASE 2

Top Secret RUFF []

25X1

39. (TSR) At Novosibirsk Mobile IRBM Base 5, a foundation for a C-shaped command and control building was observed on [] near the support base.

25X1

40. (TSR) At Drovyanaya Mobile Base 4, a two-story rectangular control building with a roof-mounted YU-EL-01 antenna array has been identified under construction. Footings for two lattice towers usually associated with the YU-EL-01 were also near the control building.

41. (TSR) Modification of the Olovyannaya ICBM Complex Command Post/Bunker [] continued during the reporting period. By [] three lattice towers had been erected, and the excavation on the edge of the bunker had been backfilled. Construction continued on the three probable hardened washer antennas, and a new excavation was near the fuel and water tanks near the bunker.

25X1

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42. (TSR) At the Smorgon IRBM Regimental Headquarters Radio Communications Transmitter Station, clearings for several new probable horizontal dipole antennas were seen on []

25X1

43. (TSR) Footings for a large building were near the Mozyr MRBM Division Command Post/Bunker on []

25X1

44. (TSR) A new two-story building was complete near the control bunker at Smorgon Mobile IRBM Base 1 by September. The new building is cable connected to the adjacent regimental command post/bunker.

45. (TSR) A large, C-shaped headquarters/administration building was complete by [] in the support area of Konkovich Mobile IRBM Base.

25X1

REFERENCES

IMAGERY

(TSR) All applicable KEYHOLE imagery acquired from [] was used in the preparation of this report.

25X1

DOCUMENTS

1. NPIC [] RCA-01/0008/80, *Soviet Mobile Missile Summary*, [] (S), Oct 80 (TOP SECRET []) 25X1
2. DoD/DEFSMAC. S/DQ/718-80, *SS-20 IRBM Launched from Kapustin Yar*, [] (S), 031956Z Nov 80 (SECRET) 25X1
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RELATED DOCUMENT

NPIC. [] IAR-0100/80, *SS-20 Field Training Areas, USSR* (S), Jun 80 (TOP SECRET []) 25X1

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REQUIREMENT

25X1

(S) Comments and queries regarding this report are welcome. They may be directed to the following points of contact in the Soviet Strategic Forces Division, Imagery Exploitation Group, NPIC:

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Table 3. Command and Control Developments at Deployed SS-16/-20 Associated Facilities as of [REDACTED] This table in its entirety is classified TOP SECRET RUFF

		NEW SS-16/-20-RELATED ANTENNAS										PRESENT ANTENNA INVENTORY										Comments			
		Active - Deactivated Under Construction	30-Meter Tower	Roof-Mounted Arrays (YU-EL-20)		Horizontal Dipole Antennas	Fishbone Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Lattice Towers (all types)	Horizontal Dipole Antennas	Fishbone Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Large C-shaped Hq/Admin Bldg	Small C-shaped C&C Bldg	Rectangular Bldg Assoc w/ Small C-shaped Bldg		Bunker Modification Yes/No	Completed Station	TWIN EAR Unit Regularly Seen
CHITA SRF ARMY																									
Drovyannaya ICBM Cplx																									
CP/Bnk	A	4	—	—	2	—	—	—	—	—	6	—	3	—	—	—	1	—	—	—	Comp	Type B*	No	2 prob TWIN EAR ants seen on grounds at satellite commo bldg	
CP/Alt/Bnk	A	2	—	—	—	—	—	—	—	—	2	—	4	—	—	—	3	—	—	—	No	—	Yes	Parking apron for TWIN EAR ant still ucon	
Rad Rcvr	U	2	—	—	—	—	—	—	—	2*	3	3	—	—	—	—	—	—	—	—	Yes	—	No	2 sets of mast-mounted TWIN EAR ants erected	
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	4	—	8	—	—	—	—	—	—	—	—	No	Facility now completed	
Mobile Base 1	A	2	Yes	—	—	—	—	—	—	2	2	—	—	—	—	—	2	—	—	—	—	—	—	—	Occasionally seen
Mobile Base 2	A	2	Yes	—	—	—	—	—	—	1	2	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Mobile Base 3	A	2	Yes	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Mobile Base 4	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Mobile Base 5	A	2	Yes	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Olovyannaya ICBM Cplx																									
CP/Bnk	U	3	—	—	—	—	—	—	—	—	1	1	3	—	—	—	2	—	—	—	Yes	Type B	No	3 lattice towers erected	
CP/Alt/Bnk	A	—	—	—	—	—	—	—	—	—	—	2	4	—	—	—	5	—	—	—	No	—	No	—	—
Rad Rcvr	A	—	—	—	—	—	—	—	—	—	2	1	3*	—	—	2	1	—	—	—	No*	—	No	—	1 FISHBONE ant removed; 2 new bldgs in ant field
Rad Xmtr NE	A	—	—	—	—	—	—	—	—	—	—	4	—	8	—	—	—	—	—	—	No	—	No	—	—
Rad Xmtr NW	A	—	—	—	—	—	—	—	—	—	2	6	—	6	—	2	—	—	—	—	No	—	No	—	—
Mobile Base 1	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—
VINNITSA SRF ARMY																									
Mozyr MRBM Div																									
CP/Bnk	A	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2	3	—	—	—	Comp	Type A	No	New bldg ucon near bnk	
CP/Alt/Bnk	A	—	—	—	—	—	—	—	—	—	—	4	—	—	—	2	3*	—	—	—	No	—	No	—	2 masts support FORK REST ants
Rad Rcvr	A	—	—	1	—	—	—	—	—	—	—	6	—	—	—	2	2*	—	—	—	No	—	No	—	2 masts support FORK REST ants (Dec 1977 imagery)
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—	No	—	—
Mobile Base 1	A	—	No	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	No	—	Located 3.5 nm SW of div CP & rcvr
Konkovich MRBM Regt																									
CP/Bnk	A	—	—	1	—	—	—	—	—	3	—	4	—	—	—	—	1	1*	—	—	Yes	No	No	No	New hq bldg constr in support area
CP/Alt/Bnk	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	No	—
Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	8	—	—	1 prob	—	—	—	—	—	No	No	No	No	—
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	No	—
Mobile Base 1	A	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Ucon	—	—	—	—	No	—	Mobile base collocated with rcvr & CP
Kozhanovich MRBM Regt																									
CP/Bnk*	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	—	—	This facility is not the regt CP/bnk & prob never functioned as such
CP/Alt/Bnk	A	—	—	2	—	—	—	—	—	1	—	4	—	—	—	2	—	3	Ucon	1*	No	No	No	—	Ants by C-shaped C&C bldg listed under rcvr totals
Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	4	—	—	—	2	—	—	—	—	No	No	No	—	—
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	—	—	—
Mobile Base 1	A	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Mobile base collocated with rcvr & CP
Gomel MRBM Regt																									
CP/Bnk	A	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2	3	—	—	—	No	No	No	No	2 masts support FORK REST ant
CP/Alt/Bnk	A	—	—	—	—	—	—	—	—	—	—	2	—	—	—	1	5*	—	—	—	No	No	No	No	3 FORK REST ants
Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	8	—	—	—	4	—	3*	—	—	No	No	No	No	—
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	No	—
Mobile Base 1	U	—	No	—	—	—	—	—	—	—	—	2*	—	—	—	—	—	—	Ucon	Comp	Comp	—	—	No	Rechitsa Mobile IRBM Spt Base; ants located by C-shaped C&C bldg
OMSK SRF ARMY																									
Novosibirsk ICBM Cplx																									
CP/Bnk	A	2	—	—	1	—	—	—	—	1	4	2	1	—	—	—	2	—	—	—	Comp	—	—	—	—
CP/Alt/Bnk	A	1	—	—	2	—	—	—	—	2	1	2	2	—	—	—	1	2*	—	—	—	—	—	—	—
Rad Rcvr	A	2	—	7	—	6	—	—	—	1	2	7	—	6	—	—	—	1	—	—	No	—	No	—	1 mast supports FORK REST ant
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Mobile Base 1	A	2	Yes	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Mobile Base 2	A	2	Yes	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Mobile Base 3	A	2	Yes	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Mobile Base 4	U	2	Yes	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—
Mobile Base 5	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—	Foundation near support area
SMOLENSK SRF ARMY																									
Postavy MR/IRBM Div																									
CP/Bnk	A	1	—	3	—	—	1	—	—	—	1	5	—	—	1	—	3	—	—	—	Comp	No	Yes	—	Bldg ucon near antenna field undergoing modification; 6 van trucks & trailers at bnk
CP/Alt/Bnk	A	2	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	Yes	No	No	No	—
Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	9	—	—	2	—	6	—	—	—	No	No	No	No	—
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	No	—

*See comments.

25X1

Table 3. (Continued)

		Active	Deactivated	Under Construction	30-Meter Tower	Lattice	Roof-Mounted Arrays (YU-2L-01)	Horizontal Dipole Antennas	Fishbone Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Lattice Towers (all types)	Horizontal Dipole Antennas	Fishbone Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Large C-Shaped Hq/ Admin Bldg	Small C-Shaped C&C Bldg	Rectangular Bldg Assoc w/ Small C-Shaped Bldg	Bunker Modification	Yes-No-Completed	Communications Satellite Station	TWIN FLAR Unit	Regularly Seen		Comments	
Postavy MRBM Regt	CP/Bnk	A	D	—	—	2	—	—	—	—	—	—	—	2	—	—	—	—	—	1	Comp	—	—	Comp	No	No	No	—	Facility deactivated	25X1	
	Rad Rcvr	A	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	—	Mobile base collocated with regt CP & rcvr	25X1		
	Mobile Base 1	A	—	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Yes	—	Mobile base collocated with regt CP & rcvr	25X1		
Smorgon MRBM Regt	CP/Bnk	A	—	—	—	2	—	—	—	—	—	—	1	—	2	—	—	—	—	—	1	—	—	—	Comp	No	No	—	Bldg near cp/bnk comp	25X1	
	Rad Rcvr	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	—	Several new ants ucon	25X1		
	Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	2	—	—	—	—	—	—	No	No	No	—	—	25X1	
	Mobile Base 1	A	—	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Comp	—	—	—	—	No	—	Poss roof-mounted ants ucon	25X1	
	Mobile Base 2	U	—	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	—	25X1	
Polotsk MRBM Regt	CP/Bnk (	A	—	—	—	2	—	—	—	—	—	—	3	—	2	—	—	—	—	—	3	—	—	—	Yes	No	No	—	—	25X1
	Rad Rcvr	D	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	No	No	No	—	—	25X1		
	Rad Xmtr*	A	—	—	—	—	—	—	—	—	—	—	—	8	—	—	—	2	—	—	1*	—	—	—	No	No	No	—	Polotsk/Diana MRBM Regt Xmtr; mast supports a FORK REST ant	25X1	
	Mobile Base 1	A	—	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	25X1	
	Mobile Base 2	U	—	—	No	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	Ucon	—	—	—	—	No	—	Poss roof-mounted ants	25X1	
Lida MRBM Div	CP/Bnk	A	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	No	No	No	—	—	25X1		
	Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	—	2	—	2*	—	—	—	2	—	—	—	No	No	No	—	Double rhombic antennas	25X1		
	Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	10	—	—	—	4	—	2	—	—	—	No	No	No	—	—	25X1		
Lida MRBM Regt	CP/Bnk	A	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2	—	1*	2	—	—	—	—	No	No	—	At LS-2	25X1	
	Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—	Type B	25X1	
	Mobile Base 1	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	At LS-1	25X1	
Gresk MRBM Regt	CP/Bnk	A	—	—	—	2	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25X1	
	Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25X1	
	Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	2	—	—	—	—	—	—	—	—	—	—	Type B	25X1	
	Mobile IRBM Base 1	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Ucon	No	No	No	No	—	Mobile base collocated with CP & rcvr	25X1		
ORENBURG SRF ARMY																															
Verkhnyaya Salda ICBM Cplx	CP/Bnk	A	7	—	—	5	1	—	—	—	—	—	—	9	5	1	—	—	—	1	—	—	—	Comp	No	No	—	Currently undergoing modification	25X1		
	Rad Rcvr	A	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	2	2	5	—	—	—	No	No	No	—	Facility prob deactivated	25X1		
	Hq Spt Rcvr (	A	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	No	No	No	—	2 FORK REST ants	25X1	
	Rad Xmtr	A	—	—	—	—	—	—	1	—	—	—	—	7	—	3	—	1	—	4	—	—	—	Ucon	No	No	—	—	25X1		
	Mobile Base 1	A	2	Yes	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	25X1	
	Mobile Base 2	A	2	Yes	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	—	25X1
	Mobile Base 3	U	2	Yes	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	—	25X1
	Mobile Base 4	U	2	No	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	1*	—	—	—	—	No	—	Prob roof-mounted ants	25X1	
VLADIMIR SRF ARMY																															
Yurya ICBM Cplx	CP/Bnk	A	7	—	—	4	1	—	—	—	—	—	—	9	4	1	—	—	—	2	—	—	—	Comp	No	No	—	Bunker mod underway; 2 new bks ucon near CP/bnk	25X1		
	Rad Rcvr (	A	—	—	—	—	—	—	—	—	—	—	—	8	—	—	—	2	—	2*	—	—	—	No	No	No	—	2 FORK REST ants	25X1	
	Rad Xmtr (	A	—	—	—	—	—	—	—	—	—	—	—	10	—	1	—	—	—	6*	—	—	—	No	No	No	—	3 FORK REST ants; 1 R-400 ant	25X1	
	Mobile Base 1	A	2	Yes	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	25X1	
	Mobile Base 2	A	2	Yes	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	25X1	
	Mobile Base 3	U	2	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	—	—	25X1	
	Mobile Base 4	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1*	—	—	—	No	—	Prob roof-mounted ants	25X1		

*See comments.

25X1

Top Secret



Top Secret